## ABSTRACT OF THE DISCLOSURE

A system and method for carrier transport traffic management. A host computer connects to a fabrication tool, configured to acquire an available number of a resource type for the fabrication tool upon detecting a fabrication tool loadport of the fabrication tool is available. A material transport system connects to the host computer, receives the available number of a resource type for the fabrication tool, acquires a carrier identity corresponding to a carrier, acquires a required number of the resource type corresponding to the carrier, and issues a load command to an automated material handling system (AMHS) to transport the carrier to the fabrication tool if the available number of the resource type exceeds or equals to the required number of the resource type.